REMARKS

Claim Objections

In the Office Action mailed May 25, 2004, the Examiner objected to claims 2, 4, 27, 37, 40, 48, 71, 86 and 104 for informalities. Applicants have amended all of these claims pursuant to the Examiners helpful suggestions. Applicants respectfully request reconsideration of these claims.

Additionally, the Examiner objected to claim 39 as being a substantial duplicate of claim 29. Applicants have amended claim 39 to correctly depend on claim 30. Applicants respectfully request reconsideration of these claims. Applicants believe this amendment brings the claim into condition for allowance. Applicants respectfully request reconsideration of this claim.

Claim Rejections

The Examiner rejected claims 27, 37 and 58-61 under 35 U.S.C. § 112, First Paragraph as failing to comply with the enablement requirement. Applicants have amended claims 27 and 37 in accordance with the Examiner's helpful suggestions. More specifically, claims 27 and 37 now recite summing the scaled signals. Applicants believe these amendments bring the claims into condition for allowance. Applicants respectfully request reconsideration and allowance of claims 27 and 37.

Regarding claims 58-61, Applicants have amended claims 58 and 60. In claim 58, Applicants now recite a method for processing a composite CDMA signal, comprising (a) estimating at least one of a time offset, a code offset, and a Doppler offset corresponding to at least one CDMA signal segment, (b) determining an interference code corresponding to the at least one CDMA signal segment in response to (a) and (c) building a space S using the interference code. Similarly, claim 60 has been amended and now recites that the method further comprises (d) estimating at least one of a time offset, a code offset, and a Doppler offset corresponding to a second CDMA signal segment, (e) determining a second interference code corresponding to the second CDMA a signal segment in response to (d), (f) building a space H using the second interference code, and (g) determining a projection operator using the S and H spaces. Estimating time, Doppler and/or code offsets is well-known to those skilled in the art.

Drawings

Regarding the Examiner's comment that the file did not include the drawings as indicated in the Request for Drawing Changes amending Figures 1, 4, 6, 7, 10, 11 and 12 drawings of the Preliminary Amendment filed on July 1, 2002, Applicants believe the Examiner has the drawings as filed in the Preliminary Amendment. The drawings of the Preliminary Amendment had a typographical error in Figure 8 stating "Transit", which the Examiner objected to, as opposed to the correct "Transmit". It is for this reason the Applicants believe that the Examiner has the drawings of the Preliminary Amendment. Accordingly, Applicants amend these drawings pursuant to the Examiner's objections stated below herein.

In the Drawings, the Examiner objected to figures 1, 2, 7, and 8. Please amend Figures 1, 2, 7 and 8 pursuant to the Examiner's helpful suggestions. Also, please amend Figure 4 to illustrate a corrected vector magnitude. Applicants have included a marked up copy of the amended drawings illustrating all of the changes made in RED. This marked up copy of the amended drawings is entitled "ANNOTATED MARKED UP DRAWINGS." Applicants have also included a complete set of all of the drawings as they presently stand with this amendment. Applicants maintain that these amendments are for editorial clarity and to correct minor informalities. No new matter is included in these amendments.

The Examiner rejected claims 58-61 under 35 U.S.C. 112, 1st paragraph as failing to comply with the enablement requirement. Specifically, the Examiner rejected these claims because of the limitations in claims 58 and 60 that recited using time, Doppler and/or code offsets offsets to determine interference codes. Applicants respectfully disagree with the Examiner's rejection. However, in the interests of advancing prosecution, Applicants have amended claims 58 and 60 to remove the use of such offsets to determine an interference code. Applicants may file a continuation patent application at a later date, which claims these limitations. Applicants believe these amendments bring the claims into condition for allowance. Applicants, therefore, respectfully request reconsideration and allowance of claims 58-61.

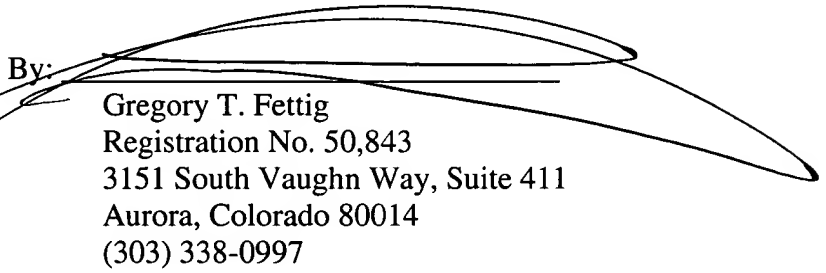
The Examiner also rejected claims 9 and 10 under 35 U.S.C. § 112, Second Paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. More specifically, the Examiner rejected the limitation "the phased RAKE means." Applicants have amended claim 9 to recite "the RAKE processing means outputting an aligned first signal." Applicants believe this amendment brings claims 9 and 10 in condition for allowance. Applicants, therefore, respectfully request reconsideration and allowance of claim 9 and 10.

CONCLUSION

Applicants have thoroughly addressed each of the Examiner's objections and rejections. Applicants have amended claims 2, 9, 13, 27, 37-39, 40, 48, 58, 60, 61, 71, 86, 104 and 106 for editorial clarity and to better protect the invention. Applicants further acknowledge the Examiner's indication of allowable claims 1-8, 11-26, 29-36, 40-57 and 61-111; Applicants sincerely appreciate the indication of allowable subject matter. Based upon the foregoing, Applicants believe that all pending claims are in condition for allowance and such disposition is respectfully requested. In the event that a telephone conversation would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned agent.

Respectfully submitted,

MARSH FISCHMANN & BREYFOGLE LLP

By: 

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Date: November 30, 2004

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ANNOTATED MARKED UP DRAWINGS

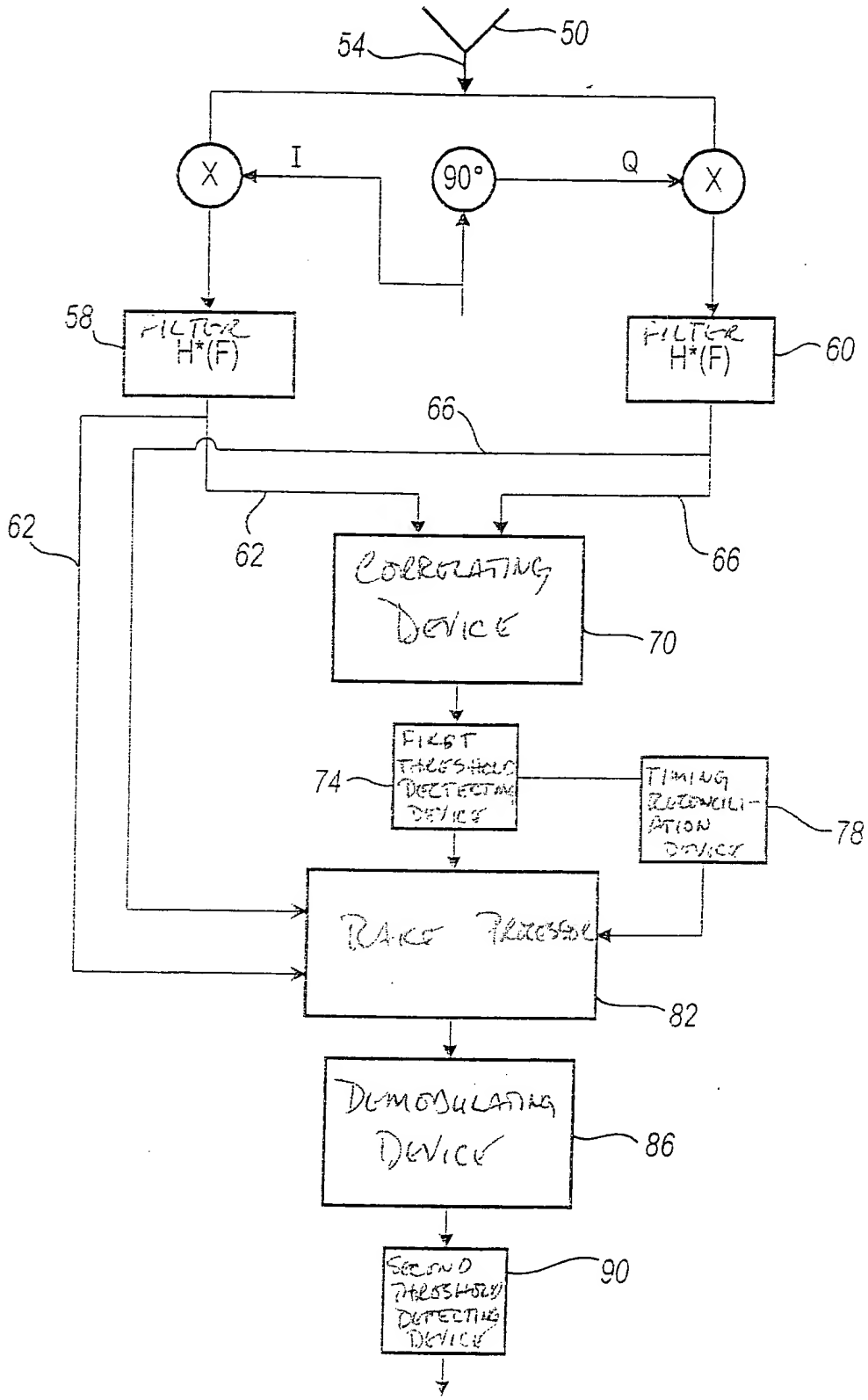

Fig. 1

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ANNOTATED MARKED UP DRAWINGS

OBLIQUE CORRELATION

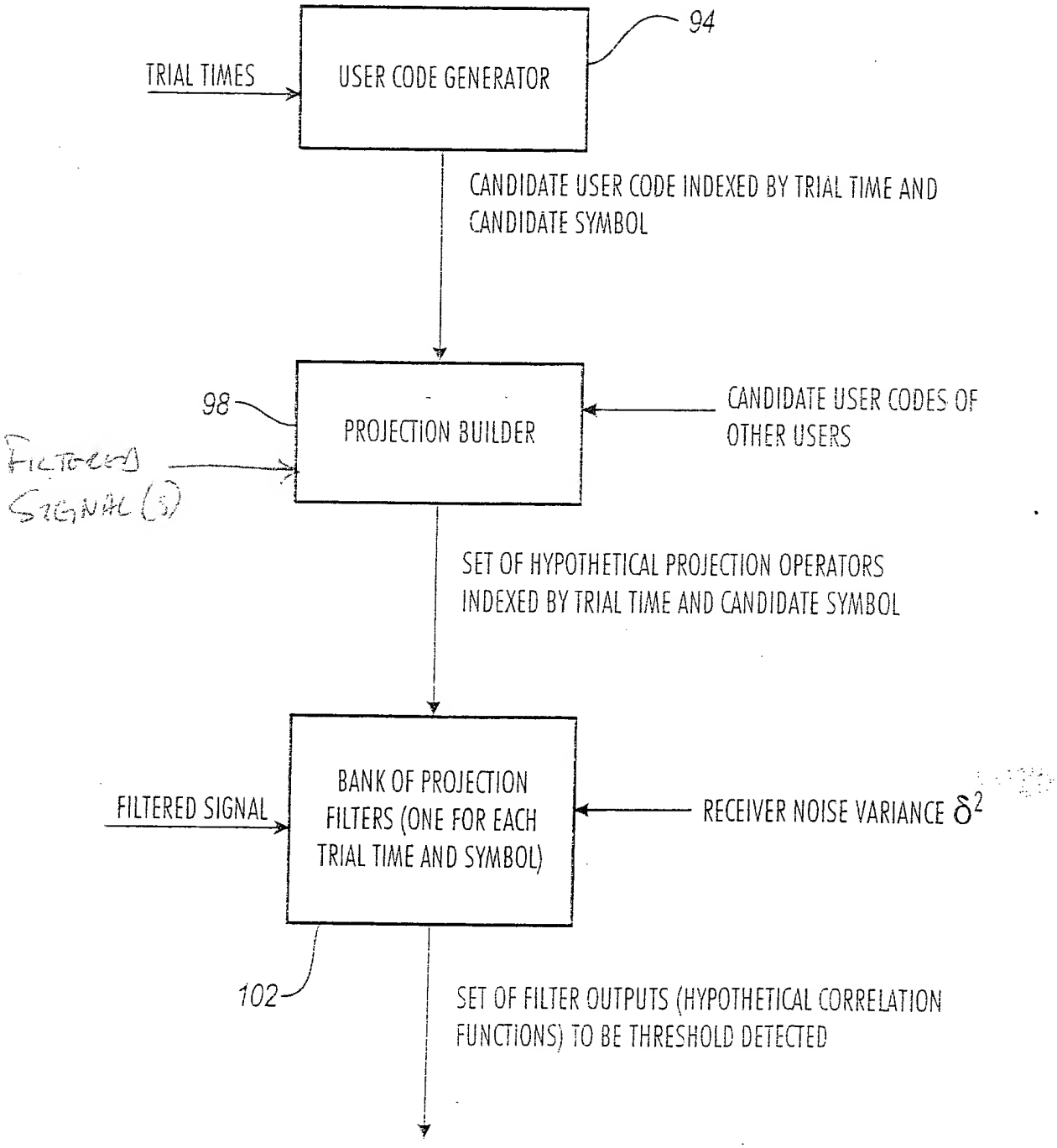

Fig. 2

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AMENDED SHEET UP : DRAWINGS

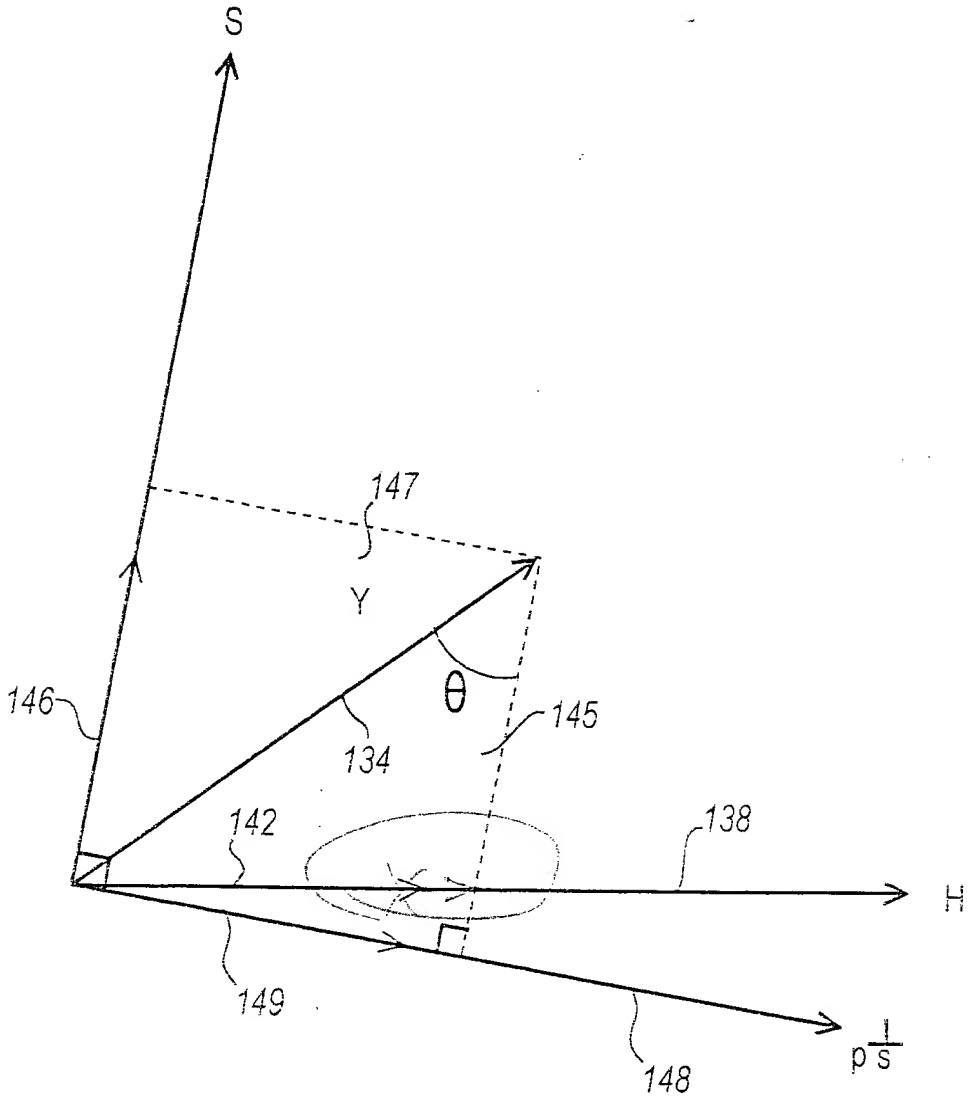

Fig. 4

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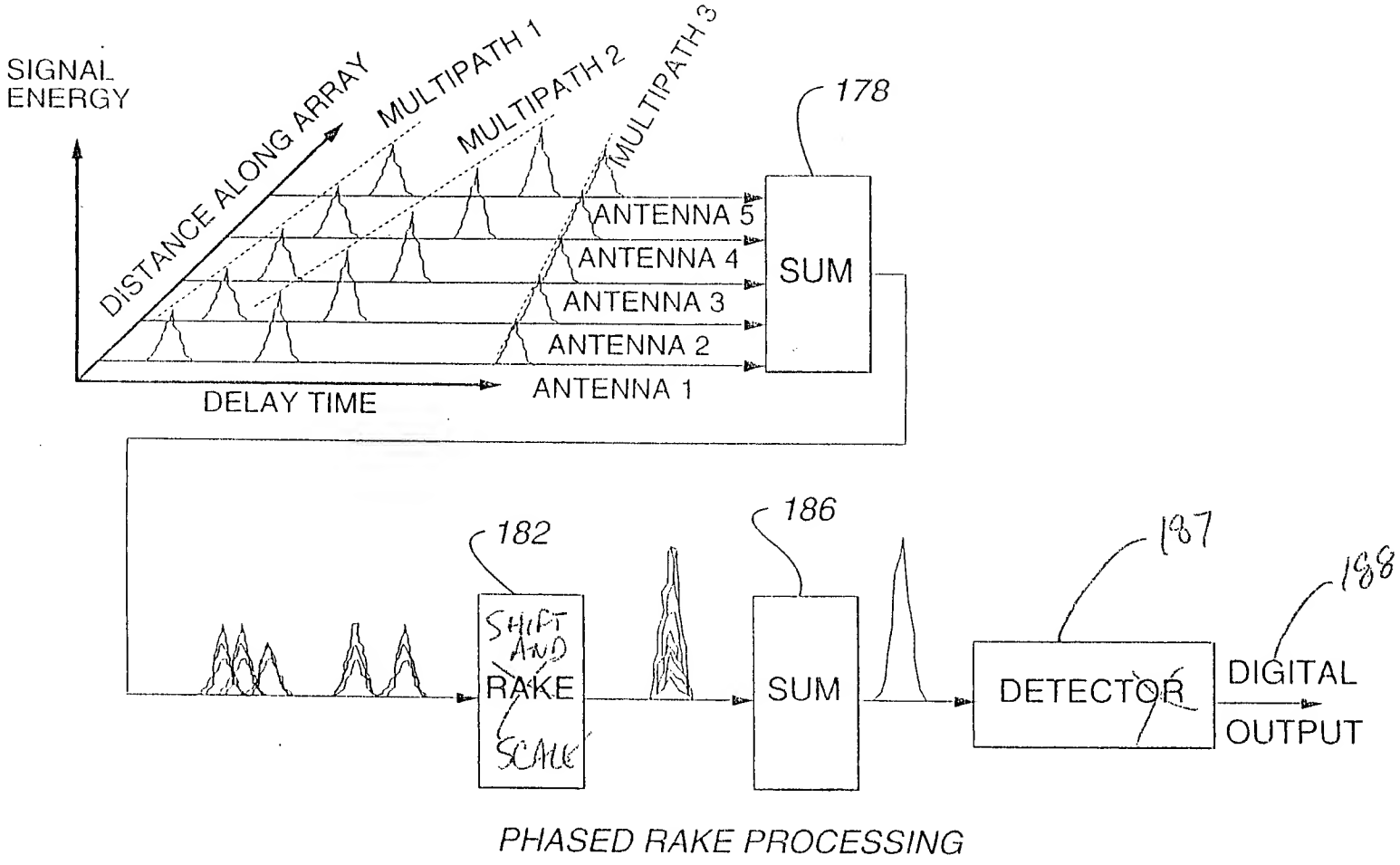

FIG. 7

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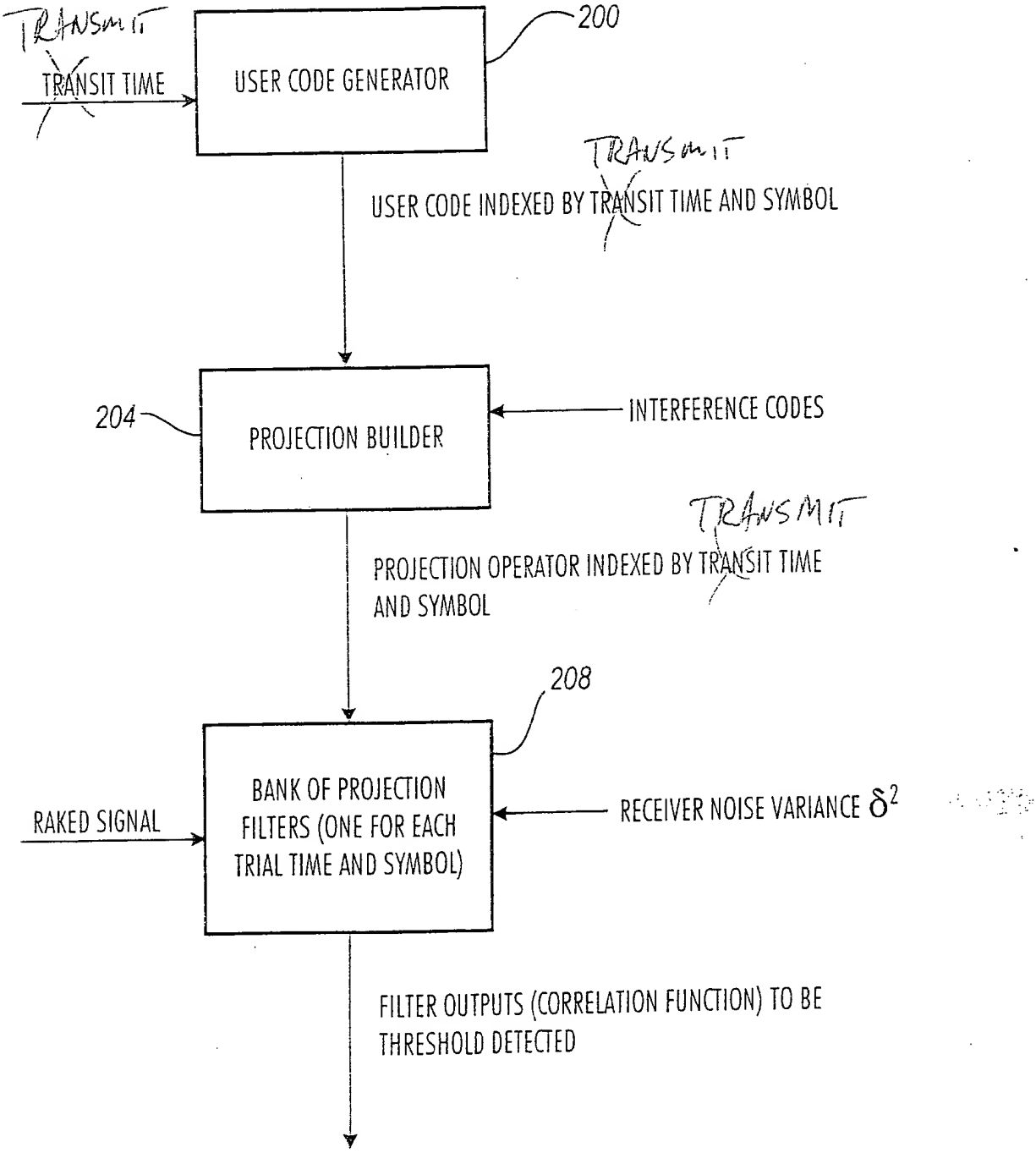

Fig. 8